

SUB SPEC
Approved for Entry

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- 1 -

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CROSS-REFERENCE TO RELATED APPLICATIONS

- [0001] This application is entitled to the benefit of and incorporates by reference essential subject matter disclosed in International Application No. PCT/SE03/00110 filed on January 23, 2003 and Swedish Patent Application No. 0200872-0 filed on March 21, 2002.

FIELD OF THE INVENTION

- [0002] The present invention relates to a centrifugal separator including a centrifugal rotor arranged for rotation around a substantially vertical rotational axis, the centrifugal rotor having a rotor body, delimiting a separation chamber, and a pumping member, that is arranged to rotate with the rotor body and to extend during the operation of the centrifugal rotor downwardly from the rotor body and into a liquid body, situated under the rotor body, for pumping of liquid from the liquid body into the rotor body.

BACKGROUND OF THE INVENTION

- [0003] A centrifugal separator of this kind may be used to remove from a liquid body having a free liquid surface a thin surface layer of the liquid body and thereafter directly separate from each other two liquids with different density, e.g. oil and water, included in the surface layer.
- [0004] A previously known centrifugal rotor having a pumping member of the initially defined kind is shown and described in WO 00/59639 and WO 00/59640.
- [0005] In WO 00/59639 a centrifugal rotor of the kind here in question is proposed to be used together with a special device for removal of a surface layer from a liquid body. The pumping member of the centrifugal rotor in this case is arranged to pump liquid into the rotor from the special device and, thus, not to pump liquid into the rotor directly from the liquid body. A special device of this kind makes the entire separation equipment complicated and expensive.

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